

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130
617-983-6622

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD
SECRETARY

JOHN AUERBACH
COMMISSIONER

02/08/12

Mark Byron
Assistant District Attorney, Essex County

Dear ADA Byron,

Enclosed are copies of the information you requested regarding sample number [REDACTED] in the following:

1. Drug Analysis Laboratory Receipt.
2. Curriculum Vitae for Daniela Frasca and Annie Khan (Dookhan).
3. Control Card with Analytical Results for sample number [REDACTED]
4. Analysis Notation Forms for the above sample number.
5. GC-MS Raw Data Sheets for the above sample number.

GC-MS confirmatory testing was performed by Annie Khan (Dookhan). All other testing was performed by Daniela Frasca. If you have any questions or concerns about these facts, please contact me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniela Frasca".

Daniela Frasca
Chemist II
Drug Laboratory
617 983-6631
fax: 617 983-6625

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
State Laboratory Institute

Boston Drug Laboratory
Tel (617) 983-6622
Fax (617) 983-6625

Amherst Drug Laboratory
Tel (413) 545-2601
Fax (413) 545-2608

Boston Hours
8:00 – 11:00
2:00 – 4:00

Amherst Hours
9:00 – 12:00
1:00 – 3:00

DRUG RECEIPT

175

City or Department: Lynn Police Reference No.: 9038320

Name and Rank of Submitting Officer: DET. MARK RICHMOND

Defendant(s) Name (last, first, initial):


To be completed by Submitter

Description of Items Submitted

To be completed by Lab Personnel

Gross Weight

Lab Number

12	PB SUBSTANCE (COCAINE)	7.6g	

Received by: EDP Date: 7-9-09

Curriculum Vitae

Daniela Frasca

Education

Suffolk University, Boston, MA

Graduated in 05/1996 and received a Bachelor of Science in Biochemistry

EXPERIENCE

Massachusetts State Laboratory Institute/DPH, Jamaica Plain, MA 01/2001 – present

Drug Laboratory: Chemist II

- Analysis of all substances by chemical screening, microscopy, and instrument confirmation to determine the presence of drugs for law enforcement agencies in the Commonwealth of Massachusetts.
- Appointed assistant analyst on January 29, 2001 by the Assistant Commissioner of DPH
- Completed four weeks of training in drug analysis under the supervision of senior chemists.

Quest Diagnostics Incorporated, Cambridge, MA 09/1996 – 10/2001

Department of Toxicology: Medical Technologist I

- Handles comprehensive toxic analysis, therapeutic drug monitoring, forensic drug screening, and compound ID's of biohazard samples utilizing standard operating procedures in clinical toxicology.
- Entered data and interpreted results for reporting
- QC/QA of multiple analytical instrumentation as well as maintenance
- Completed 60 days of training under the supervision of doctorate level toxicologists.

Additional Training and Graduate Courses

Boston University School of Medicine

Forensic Toxicology	Bloodstain Pattern Analysis	Forensic Pathology
Pattern Evidence Analysis	Trace Evidence Analysis	
Forensic Biology	Criminal Law Mock Court (Expert Witness)	

Northeastern Association of Forensic Scientists

Designer Drugs	Clandestine labs
Agilent Instruments and Software	Digital Photography

McCrone Research Institute

Scanning Electron Microscopy and X-ray Microanalysis	Forensic Polarized Microscopy
Polarized Microscopy of Illicit Drugs and Excipients	Chemical Microscopy
Sample Preparation and Manipulation for Microanalysis	

Massachusetts State Laboratory Institute

Expert Witness Testimony	Portable Raman Spectrometry
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Associations and Programs

- Northeastern Association of Forensic Scientists (NEAFS)
- The International Association of Forensic Toxicologists (TIAFT)
- The International Association of Therapeutic Drug Monitoring And Clinical Toxicology (IATDMCT)
- Massachusetts State Science Fair Judge
- Middle School State Science Fair Judge
- TTT Mentor Science Project Mentor/Tutor Volunteer

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Bachelor of Science
Major: Biochemistry
Minor: Economics

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Writing of the Standard Operating Procedures (SOPs) and Protocols.
- *Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.
- *Maintenance and repairs of analytical instruments.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health.
- *Notary Public.

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.
- *Method Development for creating new techniques for the QC Dept. and FDA.
- *Writing, revising and reviewing the Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Courses:

Department of Justice – Forensics Professionals

Introduction to Forensic Drug Chemistry
Chemical Spot Test and Mechanism for Illicit Drugs
Forensic Mass Spectrometry
Forensic Science 101: An Introduction
Fundamentals of Forensic Questioned Documents

Perspectives in Expert Testimony
Evidence Analysis
Ethics in Forensic Science
Transition to Leadership
Fundamentals of Forensic Toxicology

Additional Trainings:

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.
Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.
Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.
High Power Liquid Chromatography (HPLC) and HPLC/MS/MS trainings with Waters Cooperation.
Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectum One.
Ultraviolet–Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.
Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

Associations:

American Chemical Society (ACS)
Northeastern Association of Forensics Science (NEAFS)

No. [REDACTED]

Date Analyzed: 02-22-10

City: Lynn Police Dept.

Officer: Detective MARK RICHMOND

Def: [REDACTED]

Amount:

Subst: SUB

No. Cont: 12 Cont: pb

Date Rec'd: 07/09/2009

No. Analyzed: 2

Gross Wt.: 7.60

Net Weight: 1.559
Estimated Net wt 1.2
Tests: 14

Prelim:

(B)
Cocaine

Findings: cocaine

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DRUG POWDER ANALYSIS FORM

SAMPLE #

AGENCY

Lynn

ANALYST

VMB

PHYSICAL DESCRIPTION:

a large PIB heat
sealed separately in
evidence bag

EV. WT OK

Substance in 12 PIB (similar)

2 Mary -

Gross Wt. 2.4672g

2 Fred -

Gross wt and Net wt

2 Meck -

of 2 randomly
analyzed are on back

2 Cobalt -, +Wt add

2 Gold +

Estimated Net Wt of
12 by 2 is (1.55g)

2 TLA -, +Wt add

PRELIMINARY TEST RESULTS

RESULTS

Cocaine

DATE

2/19/10

GC/MS CONFIRMATORY TEST

RESULTS

CocaineMS
OPERATORASD

DATE

2/22/10

Sample #: [REDACTED]

samples tested: 2

#	Gross Weight	Packet Weight	Net Weight	#	Gross Weight
1	0.3776	X	0.1593	26	
2	0.1759	X	0.1004	27	
3			0.2597	28	
4				29	
5				30	
6	$\div 2 = 0.12985$		31		
7				32	
8				33	
9	$\times 12 = 1.5582$		34		
10				35	
11	154 mixed 162 in lot		36		
12	12 by 2 is 1.559		37		
13				38	
14				39	
15				40	
16				41	
17				42	
18				43	
19				44	
20				45	
21				46	
22				47	
23				48	
24				49	
25				50	

Calculations:

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0 * 2587 +

0 * 2599 +

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0 * 12985 +

0 * 12985 X

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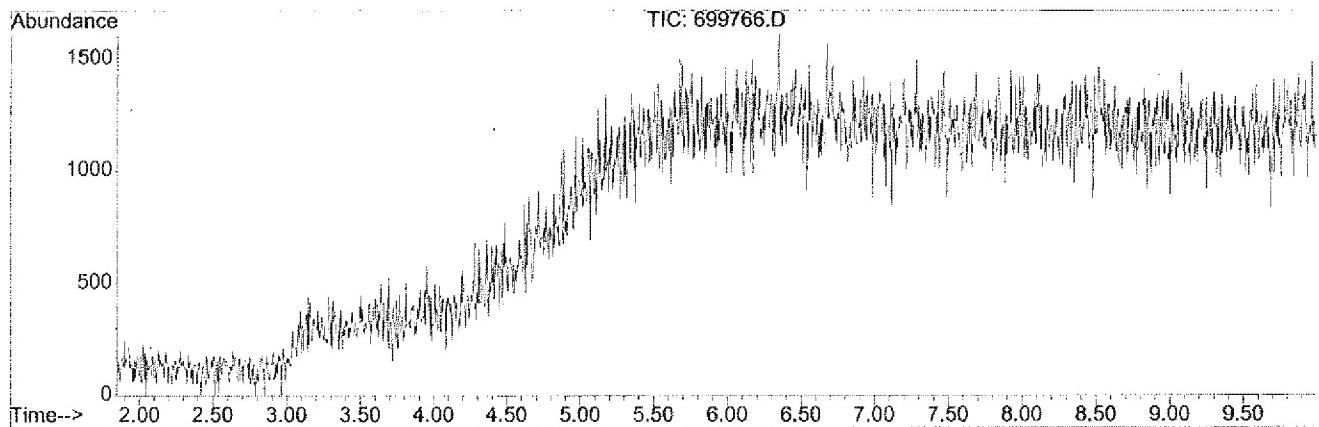
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Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699766.D
Operator : ASD
Date Acquired : 20 Feb 2010 23:35
Sample Name : BLANK
Submitted by : DCS
Vial Number : 2
AcquisitionMeth: DRUGS
Integrator : RTE

✓
ASD
02-08-12



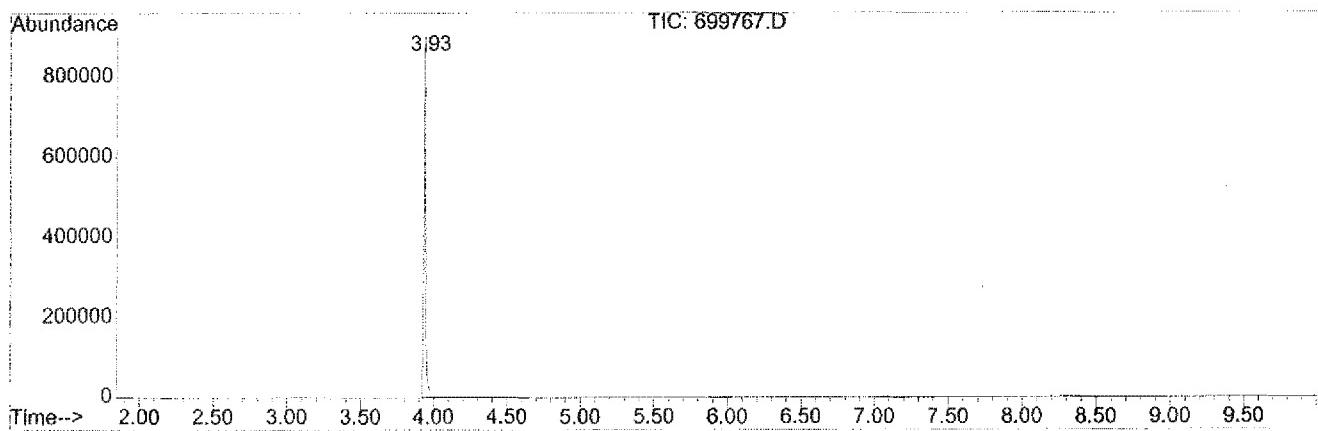
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699767.D
Operator : ASD
Date Acquired : 20 Feb 2010 23:49
Sample Name : COCAINE STD
Submitted by : DCS
Vial Number : 81
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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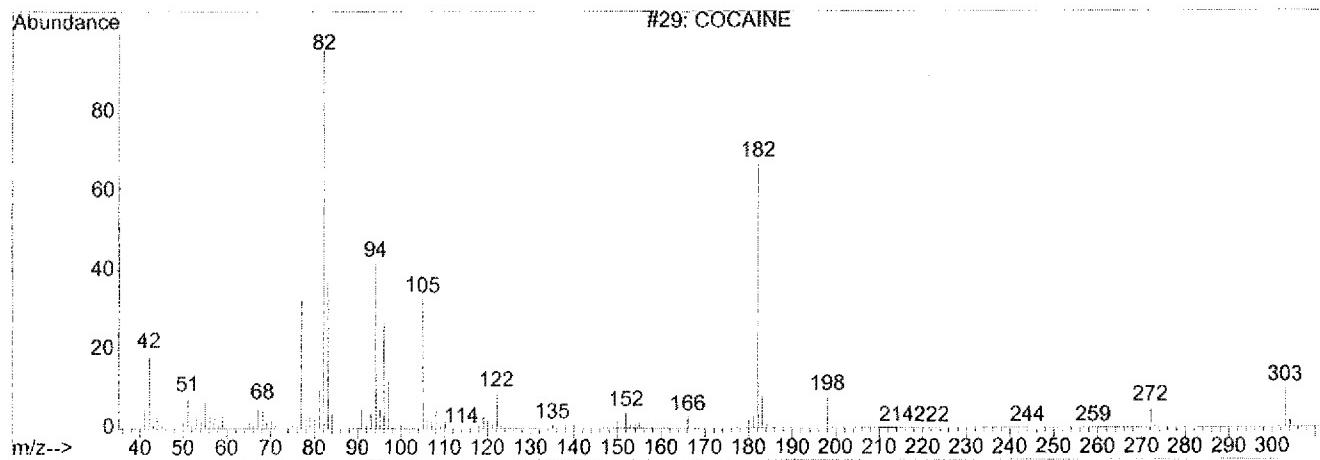
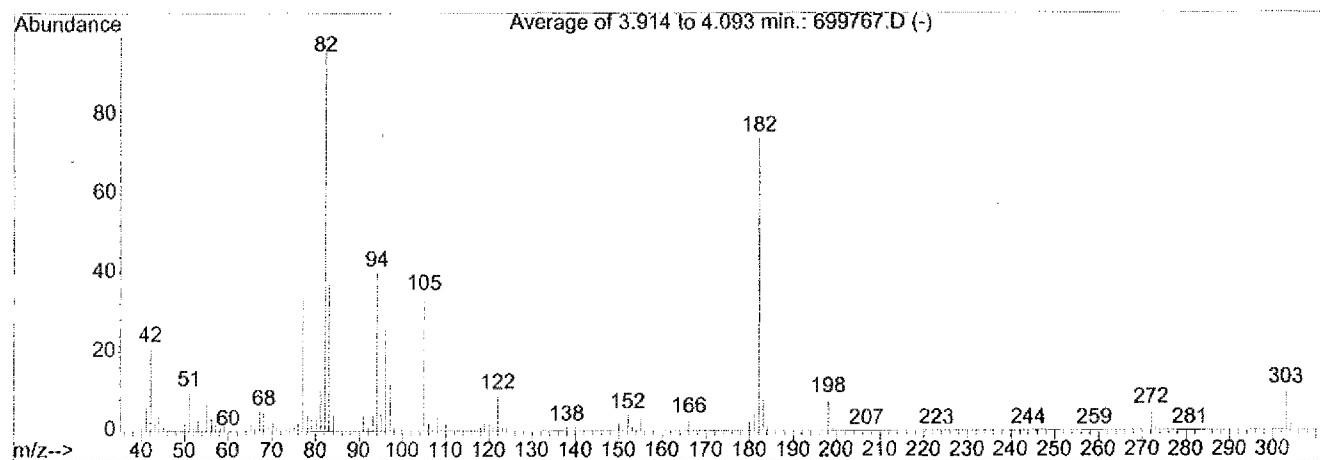
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699767.D
 Operator : ASD
 Date Acquired : 20 Feb 2010 23:49
 Sample Name : COCAINE STD
 Submitted by : DCS
 Vial Number : 81
 AcquisitionMeth: DRUGS
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
 C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
 C:\DATABASE\NIST98.L

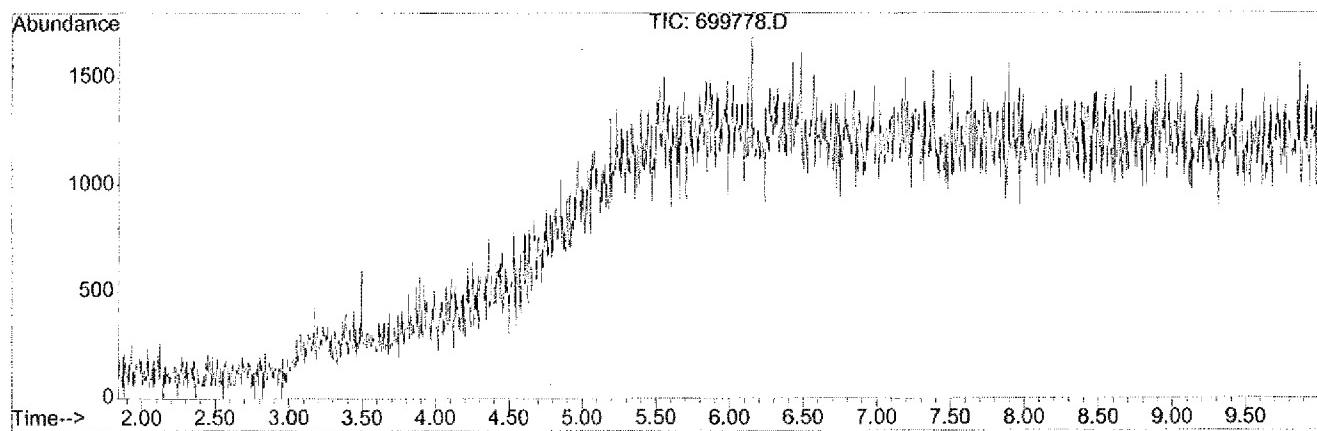
PK#	RT	Library/ID	CAS#	Qual
1	3.93	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699778.D
Operator : ASD
Date Acquired : 21 Feb 2010 2:20
Sample Name : BLANK
Submitted by : DXF
Vial Number : 2
AcquisitionMeth: DRUGS
Integrator : RTE



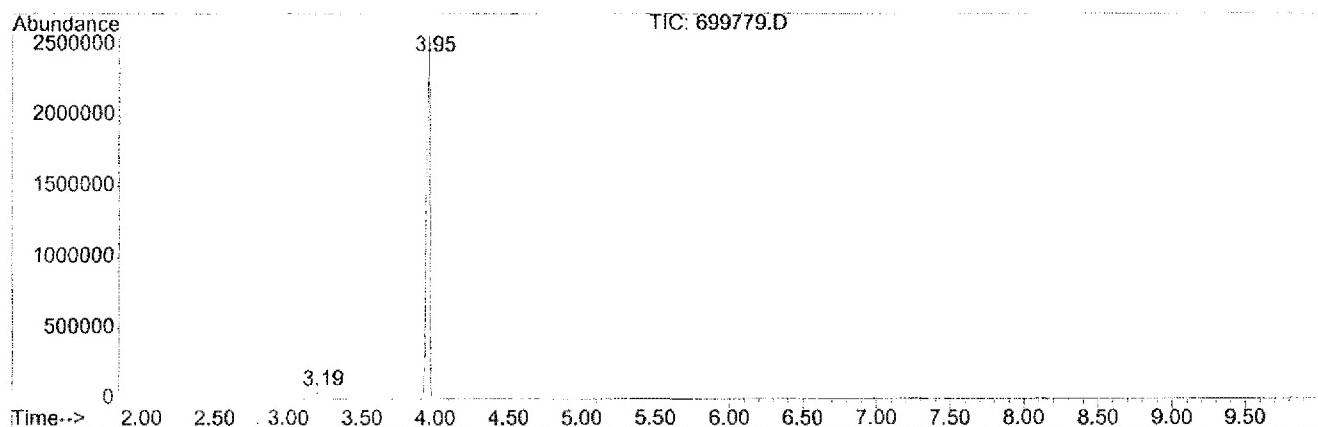
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699779.D
Operator : ASD
Date Acquired : 21 Feb 2010 2:34
Sample Name : XXXXXXXXXX
Submitted by : DXF
Vial Number : 25
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.193	124129	2.96	3.05
3.954	4073199	97.04	100.00

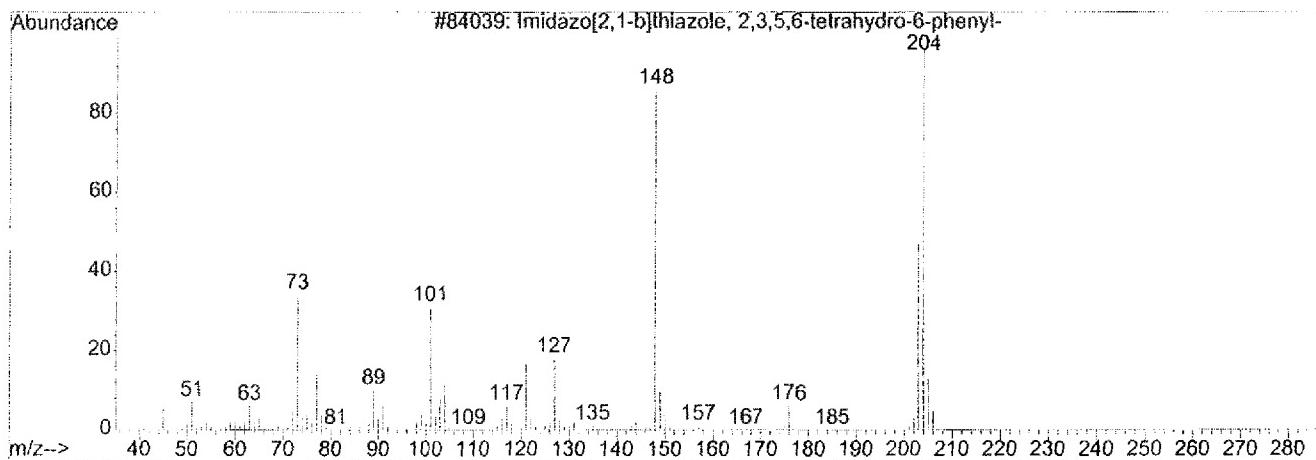
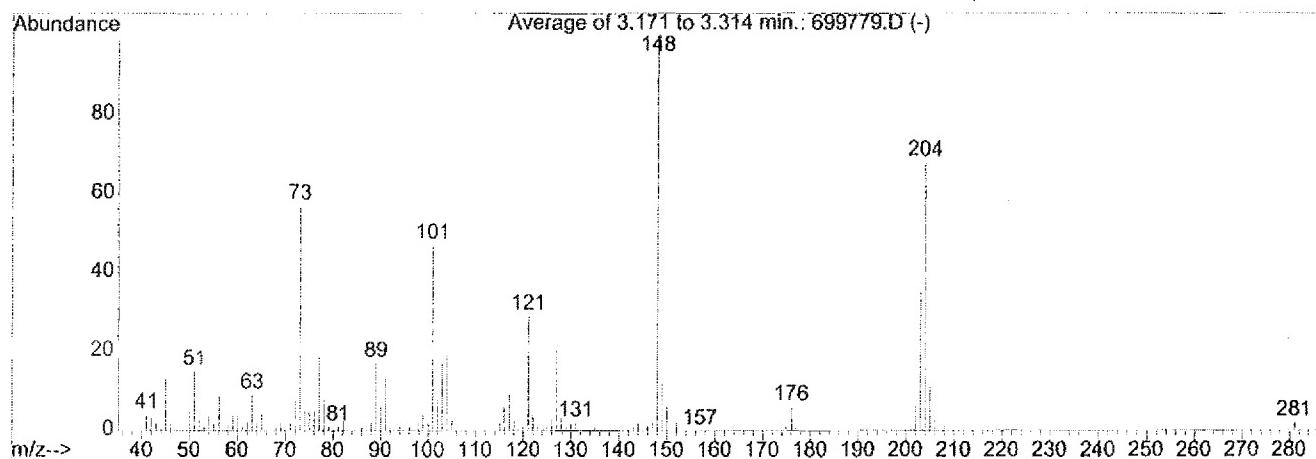
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699779.D
Operator : ASD
Date Acquired : 21 Feb 2010 2:34
Sample Name : XXXXXXXXXX
Submitted by : DXF
Vial Number : 25
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	3.19	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97



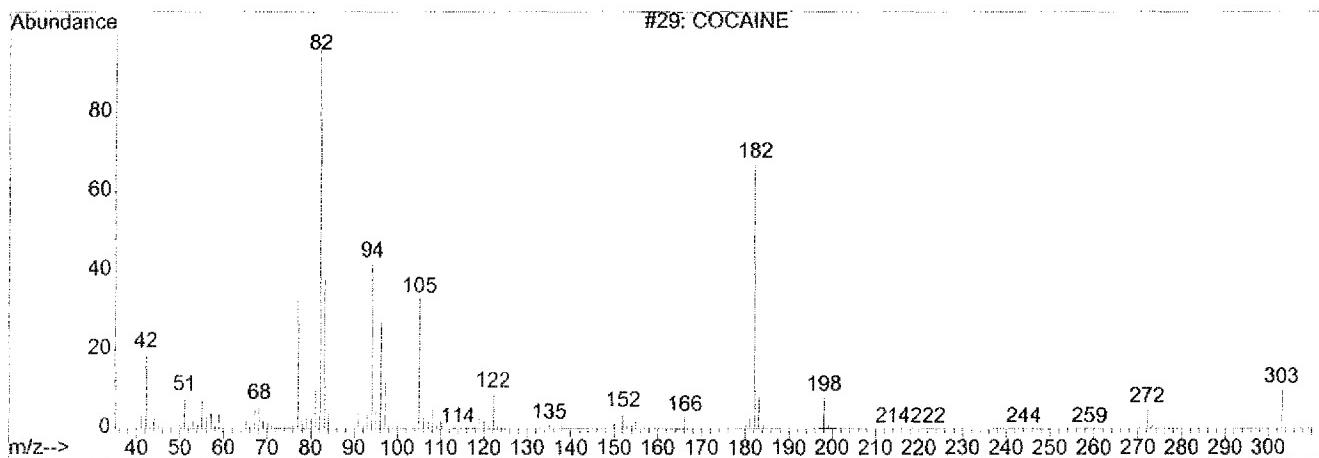
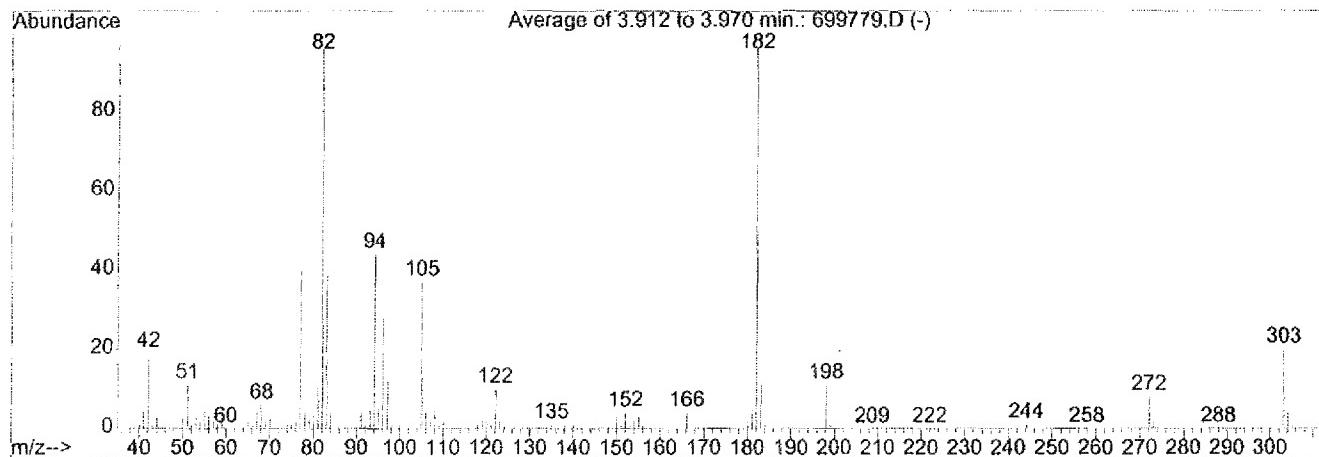
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699779.D
 Operator : ASD
 Date Acquired : 21 Feb 2010 2:34
 Sample Name : XXXXXXXXXX
 Submitted by : DXF
 Vial Number : 25
 AcquisitionMeth: DRUGS
 Integrator : RTE

Search Libraries:	C:\DATABASE\SLI.L	Minimum Quality: 90
	C:\DATABASE\PMW_TOX2.L	Minimum Quality: 90
	C:\DATABASE\NIST98.L	

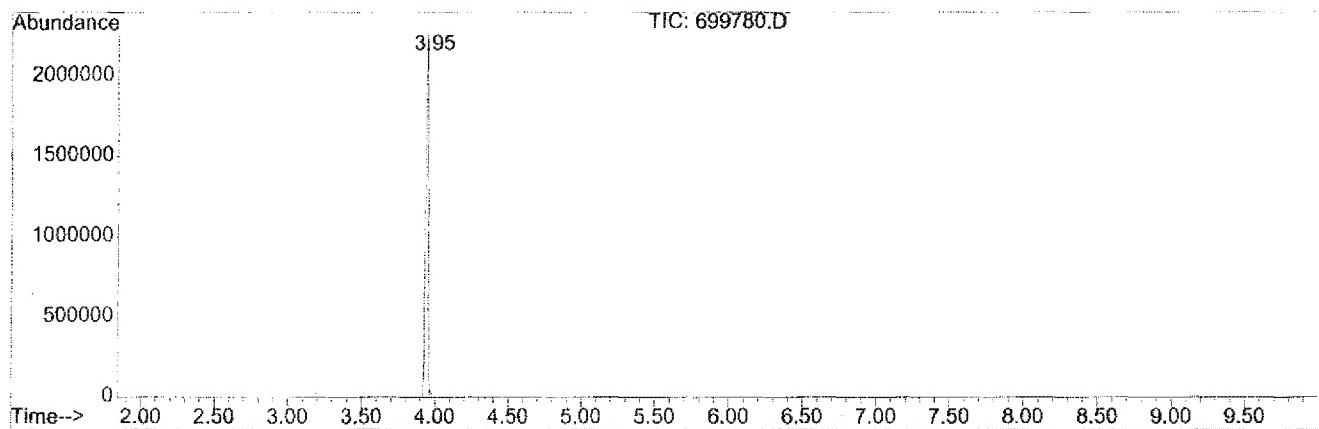
PK#	RT	Library/ID	CAS#	Qual
2	3.95	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699780.D
Operator : ASD
Date Acquired : 21 Feb 2010 2:47
Sample Name : XXXXXXXXXX
Submitted by : DXF
Vial Number : 26
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.949	2864892	100.00	100.00

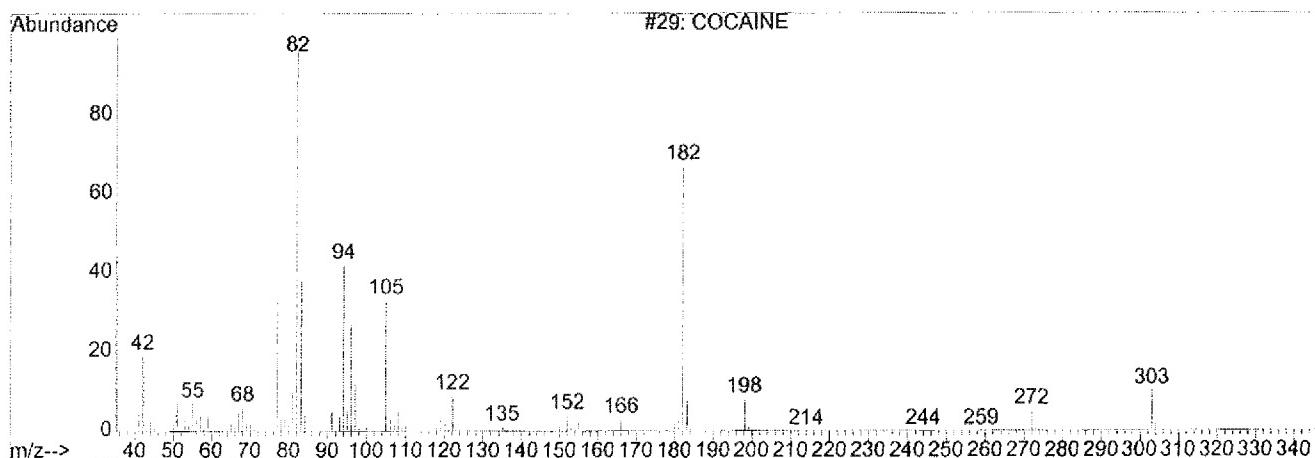
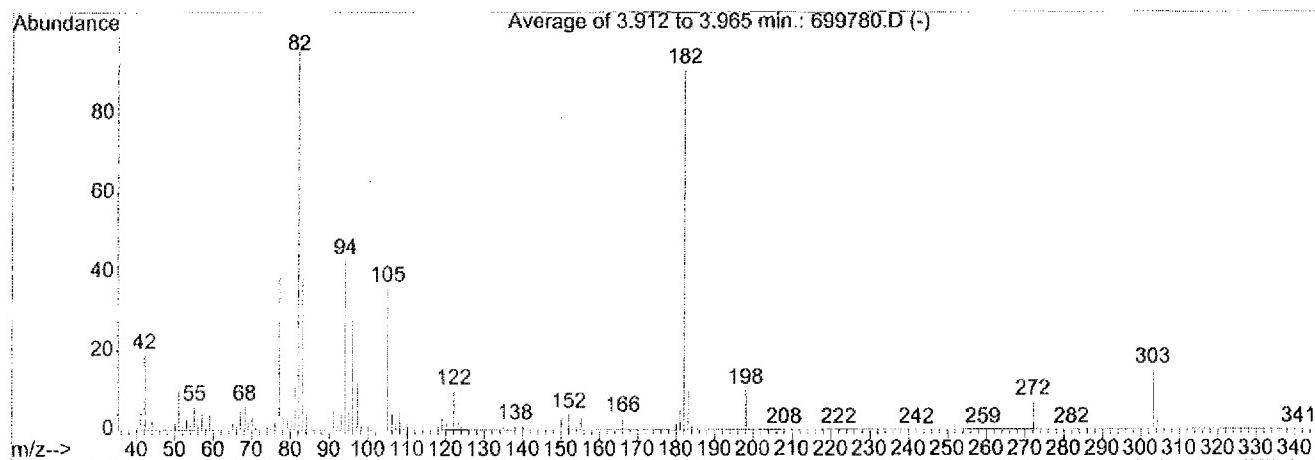
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699780.D
Operator : ASD
Date Acquired : 21 Feb 2010 2:47
Sample Name : XXXXXXXXXX
Submitted by : DXF
Vial Number : 26
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
C:\DATABASE\NIST98.L

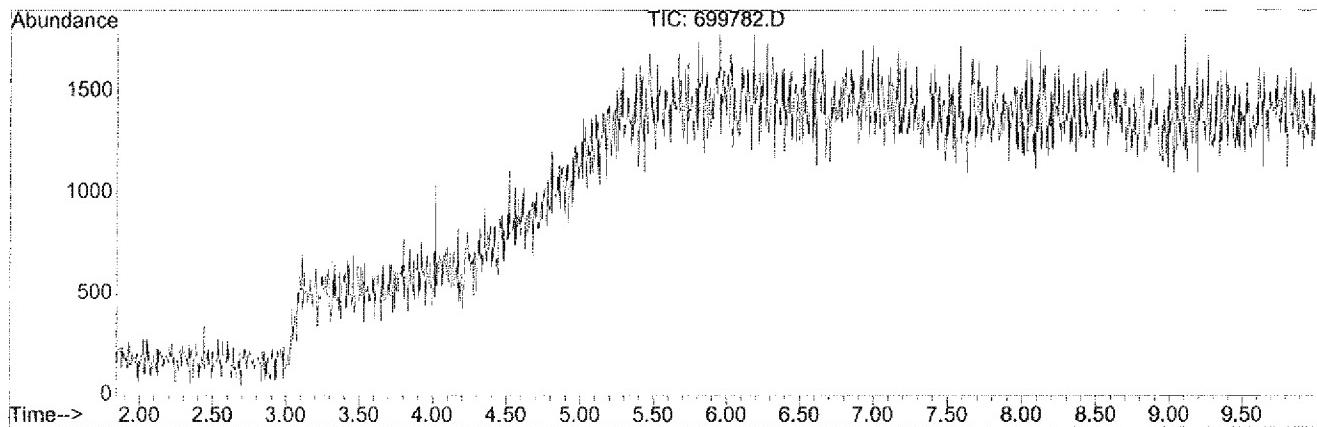
PK#	RT	Library/ID	CAS#	Qual
1	3.95	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699782.D
Operator : ASD
Date Acquired : 21 Feb 2010 3:15
Sample Name : BLANK
Submitted by :
Vial Number : 2
AcquisitionMeth: DRUGS
Integrator : RTE



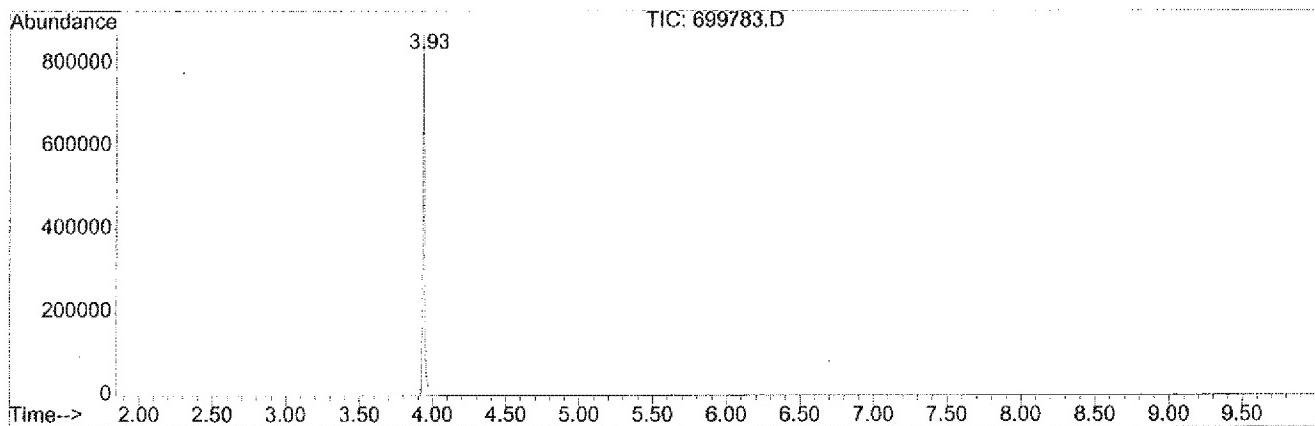
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699783.D
Operator : ASD
Date Acquired : 21 Feb 2010 3:29
Sample Name : COCAINE STD
Submitted by : KAC
Vial Number : 81
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.933	819616	100.00	100.00

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2010\SYSTEM4\02_19_10\699783.D
Operator : ASD
Date Acquired : 21 Feb 2010 3:29
Sample Name : COCAINE STD
Submitted by : KAC
Vial Number : 81
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	3.93	C:\DATABASE\SLI.L COCAINE	000050-36-2	99

